

HELP: 1-888-751-4086 (Tech Support)

1-866-894-0637 (FE)

GSPN

http://gspn3.samsungcsportal.com

PLUS ONE

http://my.plus1solutions.net/clientPortals/samsung

HOT TIPS

-Power On Problems: (pg. 3)

-Video Problems: (pg. 4)

Latest Firmware:

Please check Samsung.com for latest update!

2011 PDP Firmware for D6000, D7000 Series (T-MST5AUSC, 1009.2

- Firmware for D6000, D7000 Series
- Version: 1009.2
- Folder Name: T-MST5AUSC
- Related Models: LED: D6000, D7000 Series
- Description:

Support 3D Explore and Compassion Apps

No Service Bulletins

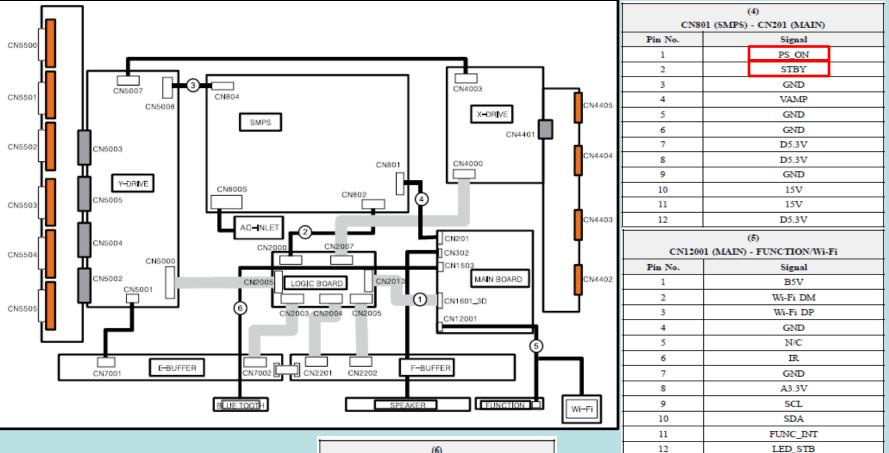
Please check GSPN for parts update!

Quick Parts List:

Version	Parts No	Short Description			
ALL	BN44-00447A	Power PCB			
ALL	BN94-04709A	Main PCB			
1201	BN96-16531A	Logic Main PCB			
ALL	BN96-16532A	Buffer E			
ALL	BN96-16533A	Buffer F			
ALL	BN96-16534A	Buffer G			
ALL	BN96-16535A	X Main			
ALL	BN96-16536A	Y Main			
ALL	BN96-16537A	Buffer X			
ALL	BN96-16538A	Buffer Y Up			
ALL	BN96-16539A	Buffer Y Down			
ALL	BN96-17107A	RF module PCB			
Y403	BN96-19070C	Function & IR PCB			
1201	BN96-19070C	Function & IR PCB			
Y404	BN96-20516A	Logic Main PCB			
Y403	BN96-20516A	Logic Main PCB			
1201	BN96-16474A	Panel			
Y403	BN96-20267A	Panel			
Y404	BN96-20268A	Panel			
ALL	BN63-07791A	Bottom Cover			
ALL	BN96-16808A	Front Cover			
ALL	BN96-16826A	Rear Cover			
ALL	BN96-16886A	Stand Guide			
ALL	BN96-18641A	Stand Guide Neck			
ALL	BN96-18955A	Stand Base			
ALL	BN96-18070B	Speaker			
ALL	BN96-18130H	LVDS Cable			
ALL	AA59-00442A	Remote			
ALL	BN63-02368B	Cleaning Cloth			
ALL	BN96-09872R	Power Cord			

Fast Track Troubleshooting Manual





Power On Sequence:

- 1. STBY 5V (CN801, #2, 5v)
- 2. PS_ON (CN801, #1, 3.3v-0v)
- 3. VS_ON (CN802, #6, 0-3.3v)
- 4. Panel should illuminate briefly

			11	1	FUNC	TINI	
(6)			12		LED_	STB	
CN1503 (MAIN) - B/T		(2)		(3)			
Pin No.	Signal CN802 (SMPS) - CN2000 (LOGIC)		CN804 (SMPS) - CN5008 (Y-BOARD)				
1	Sync_In	Pin No.	Signal	Pin No.		Signal	
2	Sync_Out	1	D5.3V		l Vs		
3	GND	2	D5.3V		2	Vs	
4	B/T_DP	3	GND		3	GND	
5	B/T_DM	4	GND		4 Vg		
6	A5V	5	PS_ON		5	GND	
7	FUNC_INT	6	VS_ON		6	Va	
		-					

PN59D6500DFXZA

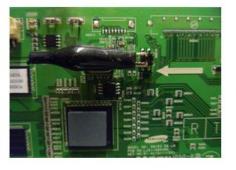
Fast Track Troubleshooting Manual



"Troubleshooting"

Activating Power & Logic Board Test Patterns without Main Board:

- 1. Remove Power Cord to Panel
- 2. Short Highest 2 Pin #s on Logic Board Test Jig (Can be 4 Pin or 6 Pin)
- 3. Remove Power Connector at Main Board (keeping connection to SMPS)
- 4. Short "Power On" Pin to Circuit Ground on Power Connector to SMPS.
- 5. Connect Power Cord to Panel







Power Supply Trouble Shooting Notes:

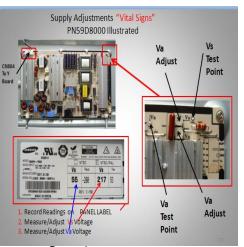
2010/2011 models

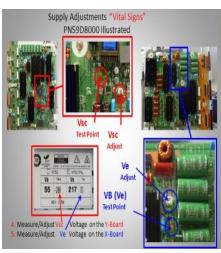
Will not be run with the "X" or "Y" main disconnected. The SMPS will shut down immediately. However if a meter is first connected to the test point when power is applied it will read the correct voltage briefly ting down. (You have enough time to check key before shutvoltages)

CAUTION: Do not reconnect any connectors to SMPS or Y/X Boards until power has been turned off long enough for Vs to drop below 10V or damage will occur to X or Y Boards.

SMPS Over Current Protection

If a short circuit occurs on either the VS or VA voltage lines, the SMPS stops operating, but should not fail. When the short circuit is removed from the source line, the Power Supply will operate normally again. Many SMPS Supplies are replaced needlessly!





Sample

"VITAL SIGNS"

When troubleshooting, It's very important to first check Vs, Va, Vsc & Ve If **Vs** is missing (0V), disconnect power and check for short. Use ohm meter to measure resistance while disconnecting Y-Board & X-Board supply feeds one at a time.

Turn Power On and Test SMPS with shorted connector removed for correct Vs voltage verification. (It may only come up briefly but to full level). Be careful not to reconnect power connectors until Vs falls below 10V.

If Va is low or missing, disconnect power connectors to Address Boards and Check to see if SMPS Supply is restored. (Note Va feed normally passes through the Y-Drive to the Address Boards (Logic Buffer Boards).

If Vsc is low or missing and Vs is OK, the failure is with the Y-Board since the Y-Board generates the Vsc voltage from the supplied Vs.

If Ve is low or missing and Vs is OK, the failure is with the X-Board since the Ve is generated by the X-Board from the supplied Vs. (Please note: In some rare cases the Ve is generated by the Y-Board fed to the X-Board.)

Other SMPS Voltages:

Check Low Voltage feeds to the Main Board and other supplied Assemblies.

PN59D6500DFXZA Fast Track Troubleshooting Manual

SAMSUNG

TROUBLESHOOTING VIDEO PROBLEMS

1. Verify Video Operation

- a) **Customer Picture Test** (if available)
- b) "Display" (If display is OK source is suspected)
- c) Substitute with known good Source (external DVD or Signal Generator)

2. <u>Using Test Patterns in Service Mode</u> - ENTERING SERVICE MODE –

Customer Remote:

- Power off
- 2. Mute, 182, Power

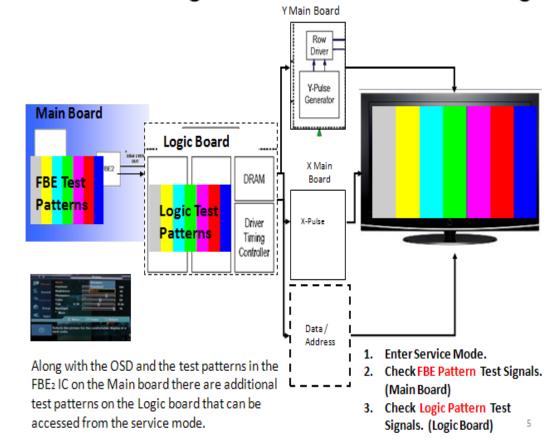
Service Remote:

- 1. Power On
- 2. Info, Factory

3. Determine cause

- a) If Logic pattern is NG; Logic board, Logic buffers or Panel are suspect.
- b) If FBE patterns is NG and Logic is OK; Main or LVDS cable are suspect.
- If both are OK it is likely a source issue.

2010 PDP Signal Path for Troubleshooting



PN59D6500DFXZA Fast Track Troubleshooting Manual



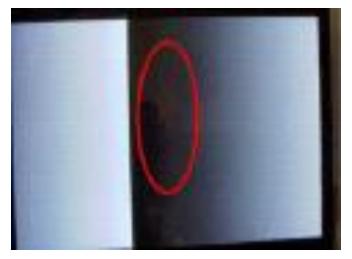
ALIGNMENTS & OPTION BYTES:

- Check/Adj. VS, VA, VE, & VSC according to Panel Label and Diffusion test. (see bulletins for any special notes before making changes)
- 2. Check/Set Option Bytes:
 - ENTER SERVICE MODE -
 - a) Customer Remote: Power off; Mute, 182, Power On
 - b) Service Remote: Power On; Info, Factory

Model Code	PN59D6500DFXZA							
	Option							
Side Label	Туре	Model	Tuner	Light Effect	Ch Table	Country	Front Color	
I201	59DSArD	PD6500	SI_ATC	OFF		USA	P-W-VIO	
I202	59DSArD	PD6500	SI_ATC	OFF		USA	P-W-VIO	
Y403	59DSArD	PD6500	SI_ATC	OFF		USA	P-W-VIO	
Y404	59DSArD	PD6500	SI_ATC	OFF		USA	P-W-VIO	

DIFFUSION TEST/ADJ. (cell miss-firing, older units)

- Allow the unit to warm up 15 to 20 minutes
- Access the Burn Protect Sig. Pattern in Cust. Menu.
- -Adjust the Vs volts until screen errors are gone in
- both dark and bright areas.
- Adjust the Vs volts within +/- 10V on the panel label.



SPECIAL NOTES:

See bulletin "Red Dots" for correction/ adjustments for this model.